FAIR train the trainers Methodology section

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Goals

A *Train the Trainer* program is designed to help participants to develop, organize, and deliver effective training.

The goal of the training is to teach participants:

❑ how to apply different training methods,

❑ how to engage participants,

❑ how to deliver training materials

❑ how to manage an interactive session

❑ how to ask for feedback.

The training cycle

- Create evaluation forms and develop techniques to ensure application after the course completion.

- Create clearly written instructions and assessment criteria to assess the learning.
- Receive and provide effective feedback.

- Deliver the training by using training activities for different learning needs.
- Present material in a clear and engaging manner.

Identify needs

Design training

Evaluate

Apply knowledge

Develop training

Deliver training

- Design a training course targeted for adult learners.
- Understanding audience knowledge level.
- Define goals.
- Competencies needed and to be achieved.

- Define learning goals.
- Prepare an effective and clear course structure.
- Prepare participant-centered learning material and activities.

Issues: Trainer

1. Characteristics and the roles of an effective trainer

➢ Requirements – expectations – roles

➢ Competencies – skills – styles

➢ Body language and basic principles of communication

➢ Presenting in front of groups

2. Trainer vs. Instructor vs. Facilitator

➢ An instructor is a content expert sharing their knowledge through writing or lectures. It is up to the participant to adapt their personal style and prior knowledge to learn new skills and knowledge.

➢ A facilitator is a process manager first, a content resource second. Facilitators use their knowledge of how people learn to create an active environment that embraces participants' prior knowledge and unique learning style. They engage the participant in taking charge of their learning.

➢ Trainers are taught to the be the backbone of training, who has total control over the learning process. There are guidelines for how materials should be delivered, specific outcomes that need to be met, and those things require someone to move those pieces forward and throughout the training experience.

3. How to motivate Learners?

Issues: Didactics and methods

The didactic know-how to be used:

❑ Adult learning theory

❑ Peer-to peer teaching

❑ Learning psychology

Teaching reality:

❑ Challenging situations

❑ Group dynamics

Methods to be used:

❑ Facilitation methods

❑ Games in training

❑ Group exercises: world cafe

HOW TO CHOOSE THE RIGHT TRAINING METHOD

AUDITORY LEARNERS
- Experiential learning
- Lectures
- Group discussions
- Recorded sessions

VISUAL LEARNERS
- Graphics-heavy Presentations
- Experiential learning

READ & WRITE LEARNERS
- Lectures with follow up worksheets
- Experiential learning
- Reading materials

KINESTHETIC LEARNERS
- Experiential learning
- Role playing

https://www.eaglesflight.com/blog/4-types-of-learners-and-the-best-employee-training-methods-for-each

Issues: training tools

Visualization and Presentation

- ➢ Presentation techniques
- ➢ Designing flip charts
- ➢ PowerPoint – Prezi
- ➢ Flip chart –white/blackboard
- ➢ Laptop and projector
- ➢ Interactive whiteboard
- ➢ Possibilities of video

Power Point presentation

Regular Assessment for learners

Training Workbook for learners

Training delivery

Group work

Case Studies

Audio/Video aids

Type of exercises

- quick warm-up / short icebreaker exercises

  small group exercises

  role-play

  discuss OS topics/statements

  marketplace: exchange experiences/expertise

  meeting with researchers / policy makers

- plenary exercises

  collaborative mapping

  simulation game

  inventorizing

  card games

Type of exercises

❑ presentations

　　role-play

　　present real-life cases/examples (also by participants)

　　one-minute presentations of a concept (by participants)

　　guest lecturers

❑ hands-on exercises (individual or in pairs)

　　visualizing

　　explore / try out tools & platforms

　　implement an open science practice in your own research

　　check reproducibility of a research paper

Open Science Training Handbook: https://book.fosteropenscience.eu/en/

Summ: Developing training materials

Step 1. Identifying objectives

Step 2. Develop a training plan: planning an overview and how training will be approached

Step 3. List necessary training materials (manuals, softwares, etc.)

Step 4. Review skills needed and to be learned

Step 5. Integrate visual elements (graphics, tables, videos, visual tools, etc.)

Step 6. Include review exercices

Step 7. Develop assessment methodology and feedback channels

Step 8. Ensure reuse of teaching materials (licenses)

Licenses

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What makes the training effective

❑ Good training ensures active participation.

❑ Good training is reactionary. It should change depending on how participants react, respond, and learn.

❑ Make it about the individual: people taking the training are individuals with individual requirements. Ensuring you meet these requirements will add to the learning experience.

❑ Review the impact: getting real-time feedback from students, making learning an active experience will make the information stick much better. Feedback helps to improve.

Training practices - Icebreakers

Diversity Bingo

After each player gets a bingo card, they mingle around introducing themselves and finding other participants who can sign their cards indicating that if a statement applies to him/her. To avoid having people only talk to one or two people and filling up their card, limit the signatures they can give to 1 or 2 per card. When everyone has reached bingo or is super close, you can share something you've learned about each other, yourself and the experience of this ice breaker activity.

B	I	N	G	O
Someone uses PIDs	someone regularly makes safe copies of his/her research data	Someone who works with genomes	someone who uses github for sharing data	someone uses licencing
someone publishes open access articles	someone has advanced FAIR principles knowledge	someone who works with sensitive data	someone who uses DMP	someone who is aware of reuseable res. data
someone who knows the benefits of good data management	someone who shares research data openly available	someone who uses rich metadata to res. data	someone who is aware of the cultural change in research	someone who knows what FAIR acronim stands for
someone who heard about EOSC	someone who heard about best practices in data management	someone who is aware of the legal aspects of sharing res. data	someone who heard about OpenAIRE	some who is aware of the ethical aspects of res. data
someone who uses DMP tool	someone who uses anonimization tool	someone who heard about open science infrastructures	someone who uses FAIR metadata vocabularies	Someone who heard about NI4OS

Training practices - Icebreakers

One Word Exercise

Pick a phrase that is central to the topic, why you've gathered and have everyone write down or say a word that comes to their mind in relation to it. Once everyone has shared their phrases, discuss the results. This ice breaker helps explore different viewpoints about a common challenge, before starting the meeting.

❑ Topics in our context: FAIR; Data Management, EOSC, Data Management Tools, Open Science, PIDs, ORDM, …

Training practices - Icebreakers

Speed Dating Icebreaker

The goal of this game is to have a succession of very rapid conversations in an extremely short amount of time with as many people as possible. Have people sit in pairs.(They should look for partners they don't know.) Determine the time limit (say 2-3 minutes for each conversation) and set a timer. When it starts, each pair has to start speed networking & find out as much professional info about the other as possible. This icebreaker can be used in large groups as well. Each time the buzzer goes off, the pair has to split and find a new partner again, looking for people they know the least.

Purpose mingle

You can use this at the beginning of each meeting, it's so simple. At the beginning of each meeting, have people walk around and share with others what they will contribute to that particular session. It's a great way to enhance engagement and help people set goals and hold themselves accountable. It also makes others aware of everyone's intent.
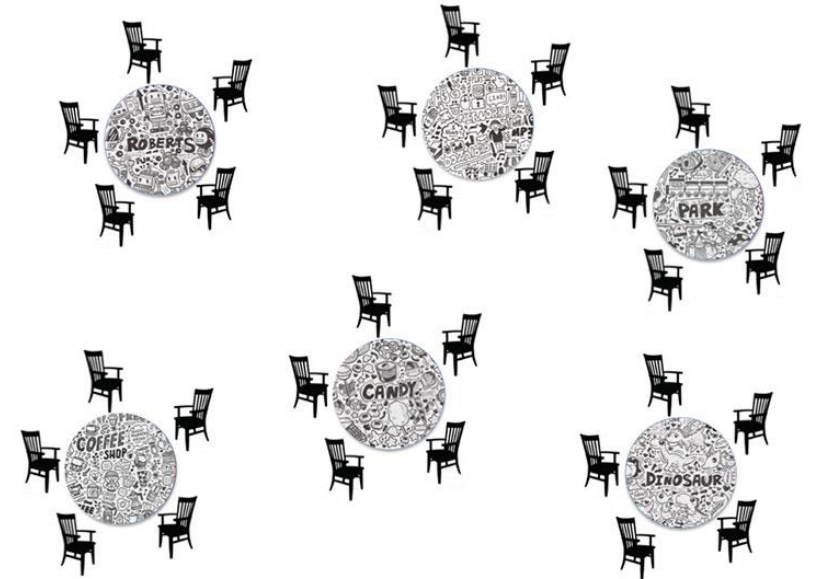
World Café

Need a short presentation (max. 15 minutes) on the topic (FAIR)

Divide the audience into groups (min. 4 - max. 6-7 person/group)

❖ Form small groups based on some tiny piece of data about them. You could use birthdays for four groups by using first, second, third, and fourth quarter of the year. You could try it by using the last digit in their telephone numbers, color of their shoes, favorite season, first letter of their middle name, or height. Have participants stand in order descending/ascending (alphabetically or by height), and then split at the quarter, or one-fifth point depending upon how many groups you desire. If you need two groups, form groups of those wearing glasses or not. In a virtual classroom assign each group to a breakout room.

❖ Use cards to form groups, use differnt signs or colors on chairs or on name badges , give them different flavoured chocholates for as many types and as many groups you would like to form, etc.

World Café Principles

1. **Set the Context**
2. **Create Hospitable Space /Café like atmosphere/**
3. **Explore Questions that Matter**
4. **Encourage Everyone's Contribution**
5. **Connect Diverse Perspectives**
6. **Listen together for Patterns and Insights**
7. **Share Collective Discoveries**

World Café

Resources Required

- ❑ 1.5 hours.
- ❑ Small round tables of about 1m diameter are perfect (40 inches).
- ❑ Enough chairs for all participants and presenters.
- ❑ White paper tablecloths to doodle on for each round table (or colorful tablecloths covered in large pieces of white paper).
- ❑ Colored water-based markers or crayons scattered on each table. Preferably dark colors so the results are easy to read.
- ❑ A side table packed with fruit and refreshments (to keep those energy levels up).
- ❑ Flip-chart to capture the final plenary discussion.
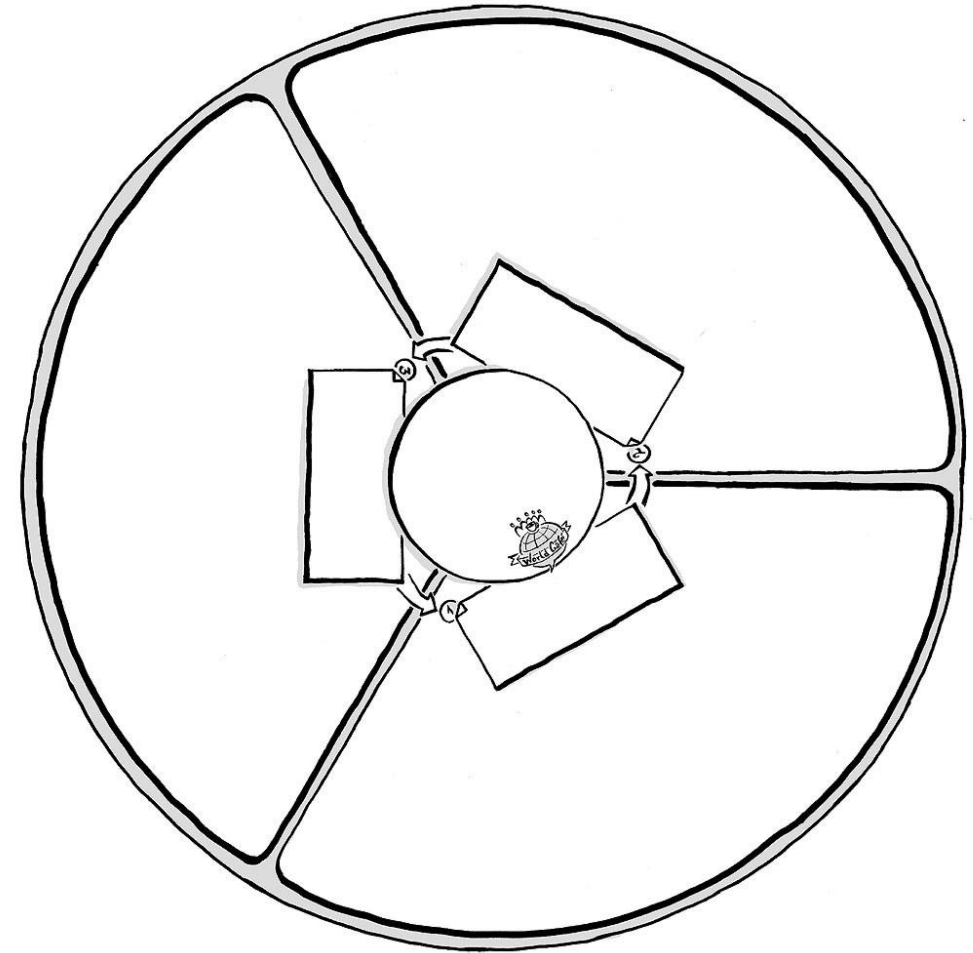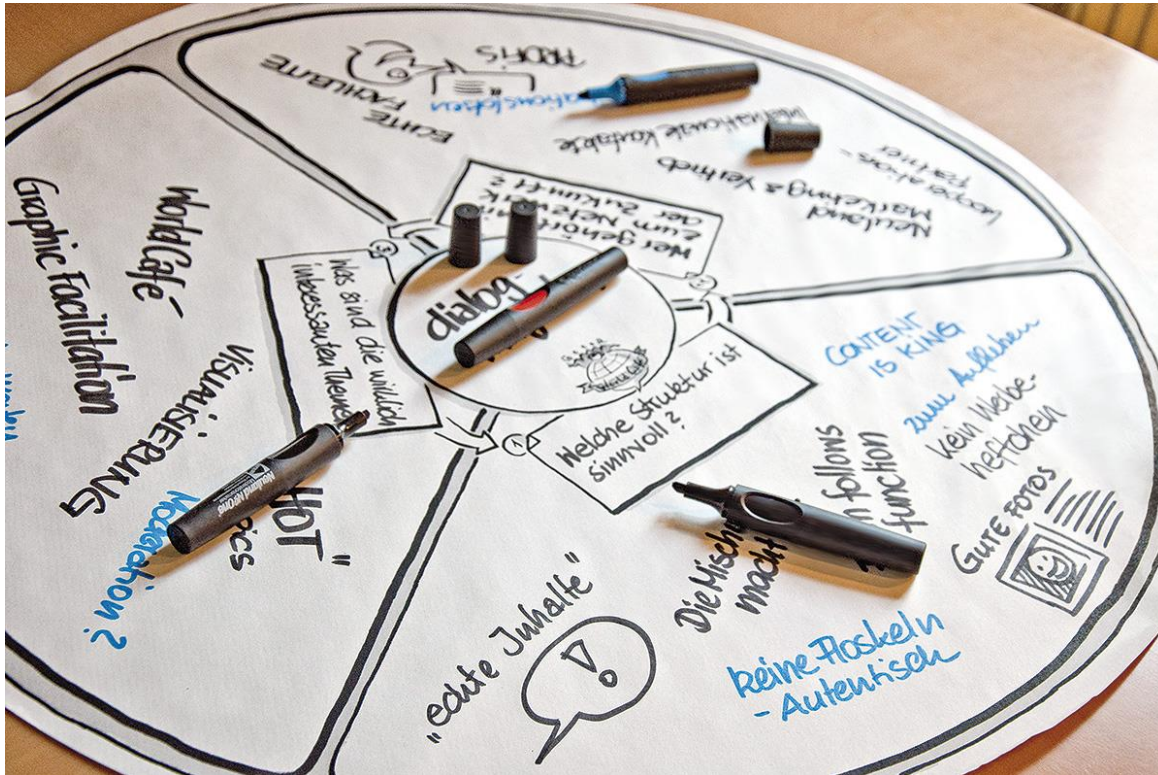
World Café

FAIR Café
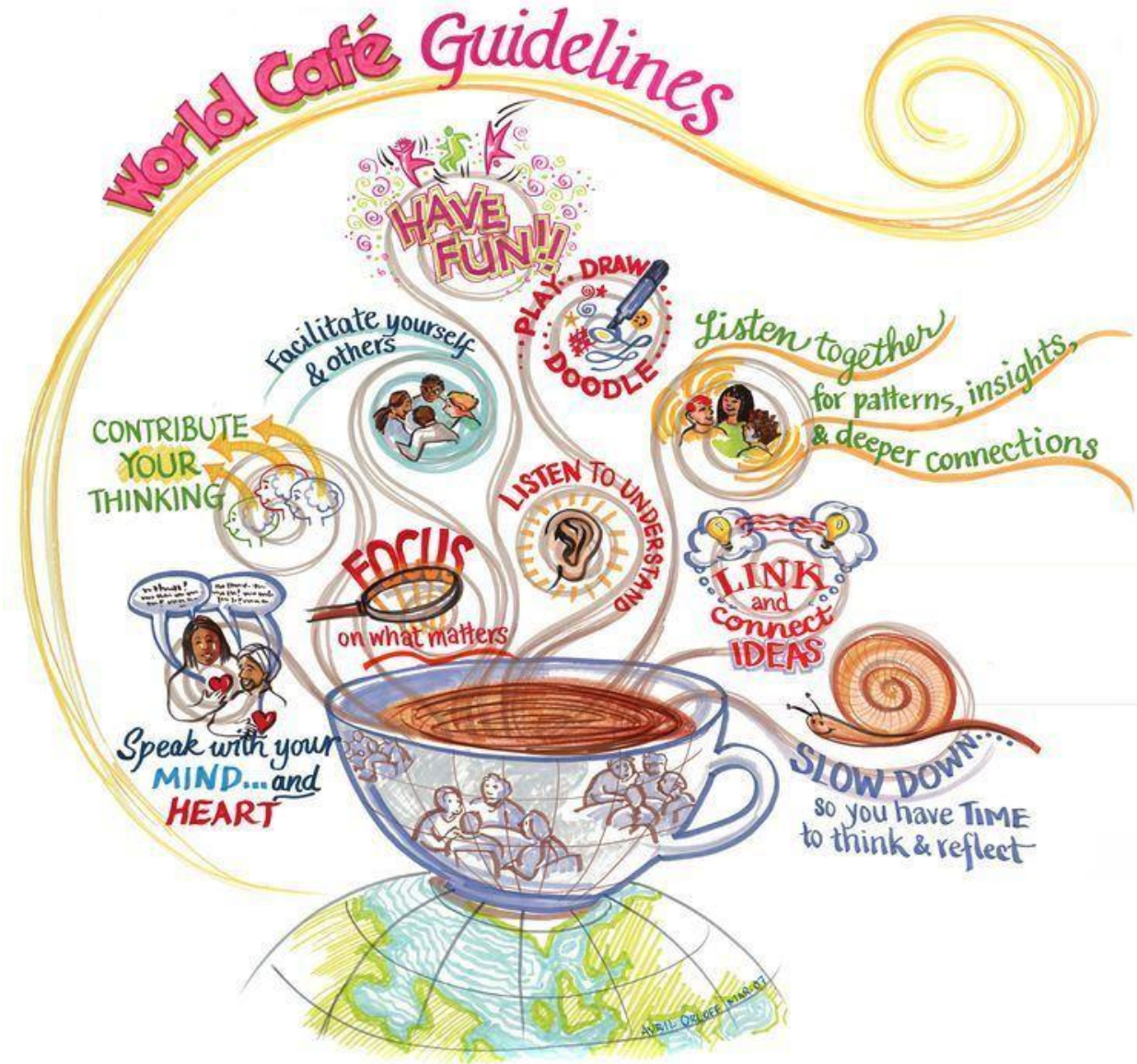
Process

- ❑ Set up small café-style tables in a rooms and seat 4 or 5 Participants at each
- ❑ The Facilitator then explains to the group they will now have 3 rounds of conversation of approximately 20-30 minutes each.
- ❑ Questions or issues on FAIR principles discussed while other groups explore similar questions at nearby tables.
- ❑ Encourages the table members to write, doodle, and draw key ideas on their paper tablecloths or to note key ideas on large index cards or placemats in the center of the group.
- ❑ After completing the 1st round of conversation, the Facilitator asks each table to agree a 'table host' who remains at the table while the others travel to different tables.
- ❑ Let the travelers begin their journey clock wise. The group travels together.
- ❑ The Table Hosts to welcome their new guests and briefly share the main ideas, themes and questions from the initial conversation (max 2 mins). Encourage guests to link and connect ideas coming from their previous table conversations – listening carefully and building on each other's contributions.
- ❑ After your 3rd round of conversation, initiate a period of sharing discoveries and insights in a whole group conversation.

FAIR Café

Ask 2-3 questions about FAIR principles

- ❑ Why are the FAIR principles needed?
- ❑ What is FAIR data?
- ❑ How to make your data findable?
- ❑ What are PIDs and what is their purpuse?
- ❑ How to make your data accessible?
- ❑ Does accessibility always means openness?
- ❑ How to make your data interoperable?
- ❑ Why do we need metadata standards?
- ❑ How to make your data reusable?
- ❑ Why is licencing important in reusability?
- ❑ How FAIR are your data?
- ❑ How to make your data FAIR?
- ❑ Why FAIR principles are fundamental part of Open Science?
- ❑ Do you use any kind of tool in the context of research data?
- ❑ How FAIR are these tools?

World Café Template

Thank you so much for your interest and attention.